Applicant:

WOODS, Woodrow

Serial No:

08/990,821

Page 2

further having a tail end, said shell tail end defining a second inwardly tapered section;

a spacer having a top, wherein said spacer is disposed between said outer shell and said inner liner [for separating] that separates said shell from said liner [at to define a] and defines an inner volume therebetween, said spacer further defining at least one passageway [there through] therethrough communicating said volume with [a second] an outer volume outside said exhaust pipe, and wherein said passageway is narrow enough to create a back pressure in said inner volume that thereby forcefully ejects water through said passageway.

 a^2

(Amended) A water jacketed exhaust pipe for marine engines comprising:

an elongated inner liner, said liner having a tail end, said tail end defining an inwardly tapered section;

an elongated outer shell, said outer shell having a tail end, said shell surrounding said liner about an elongate axis of said pipe;

a spacer angularly disposed between said outer shell and said inner liner and separating said shell from said liner and defining [a] an inner volume therebetween, said spacer further defining at least one passageway thereby fluidly communicating said



Applicant:

WOODS, Woodrow

Serial No:

08/990,821

Page 3

72

inner volume with [a second] an outer volume outside said exhaust
pipe; and,

wherein said passageway is narrow enough to create a back pressure in said inner volume that thereby forcefully ejects water through said passageway, and

wherein fluid from said [first] <u>inner</u> volume is directed toward said outer shell by said at least one passageway.

21. (Amended) A water jacketed exhaust pipe for marine engines comprising:

an elongated inner liner forming an exhaust gas duct;
an elongated outer shell, said shell surrounding said
liner about an elongate axis of said pipe, said shell further
defining a tail end, said tail end defining an inwardly tapered

section:

a spacer angularly disposed between said outer shell and said inner liner and separating said shell from said liner and defining a water containing volume therebetween, said spacer further defining at least one passageway thereby communicating said water containing volume with [a second] an outer volume outside said exhaust pipe;

wherein water from said [first] water containing volume is directed toward said outer shell by said at least one passageway, wherein said passageway is narrow enough to create a

7

Applicant: Serial No:

WOODS, Woodrow

Page 4

08/990,821

back pressure in said inner volume that thereby forcefully ejects water through said passageway, and wherein said at least one passageway is sized for allowing water to flow at a predetermined velocity, and said inner liner sized for allowing exhaust gas to flow at a predetermined velocity approximately 1.5 feet per second greater than said water velocity.

(Added) A water jacketed exhaust pipe as described in claim 1, wherein said inner liner terminates substantially even with said outer shell.

12 .

2/3. (Added) A water jacketed exhaust pipe as described in claim 1, wherein said spacer is angled between said outer shell and said inner liner so that said passageway directs water from said inner volume onto said outer shell.

13.

(Added) A water jacketed exhaust pipe as described in claim 1 further comprising:

a plurality of said passageways, wherein said passageways are more closely spaced relative to each other toward said top such that as water is ejected though said passageways a uniform volumetric flow of water is provided around said inner liner.